**Topicality Production Not R&D**

**Energy production refers to the extraction, conversion, and distribution of energy – excludes R&D**

Koplow 4 Doug Koplow is the founder of Earth Track in Cambridge, MA. He has worked on natural resource subsidy issues for 20 years, primarily in the energy sector "Subsidies to Energy Industries" Encyclopedia of Energy Vol 5 [2004www.earthtrack.net/files/Energy%20Encyclopedia,%20wv.pdf](http://2004www.earthtrack.net/files/Energy%20Encyclopedia%2C%20wv.pdf)

3. SUBSIDIES THROUGH THE FUEL CYCLE Because no two fuel cycles are exactly the same…….. the various distribution links to bring the energy resource to the point of final use, and accident risks.

**Fuel Bank Counterplan**

**Text: the United States federal government should offer to host the Gulf Cooperation Council’s multinational consortium to provide enriched uranium to states looking to build their own nuclear power program. The United States will dedicate all necessary funding to the development of a smart grid for electrical production in the US.**

**Upgrading the US to a smart grid ensures stable energy and prevents disruptions**

Wittenberg 2011 (Scientific American, Sept. 11) <http://www.scientificamerican.com/article.cfm?id=recent-blackout-highlights-nations>

Many experts say smart-grid technology would ……… toward the electric grid. Of that, $4.4 billion was dedicated directly to building a smart grid.

**Only an international fuel bank solves virtual proliferation – Countries will say yes**

Harold Feiveson, Senior Research Policy Analyst, Program on Science and Global Security, “Can Future Nuclear Power Be Made Proliferation Resistant?”, Center for International and Security Studies at Maryland, July 2008, <http://www.cissm.umd.edu/papers/files/future_nuclear_power.pdf>

It is treacherous to imagine the institutional framework that would be relevant in fifty to one hundred years. But as an initial cut, let us consider ……… and well accepted compliance provisions could provide a reasonable degree of proliferation resistance.

**South Korea Disad**

***South Korea will lead the world in SMR development until 2050 --- ensures massive export revenue now***

Kwon **Dong-joon** July 5, 20**12** Korean All-in-one SMR Won World’s First Standard Design Approval, Etnews, <http://english.etnews.com/electronics/2610838_1303.html>, KEL

The reactor development started in 1997. …………**, which is valued at approximately 350 trillion won**.”

***Plan trades off with South Korean SMR market leadership***

Christofer M. **Mowry**, President, Babcock & Wilcox Nuclear Energy, Inc., July 14, 20**11** Testimony Before the Energy & Water Subcommittee of the Senate Appropriations Committee United States Senate July 14, 2011, KEL

**Failing to move forward** ………… government support or subsidy, while creating U.S. design, supply chain, construction, and operations jobs.

***Korean nuclear industry leadership key to their economy***

**Hodge 12** (Nick Hodge, Baltimore, MD - Investment Director, Early Advantage, 7-11-12, Korea Goes Nuclear, <http://www.energyandcapital.com/articles/korea-goes-nuclear/2320>, jj)

**It's one of the fastest-growing developed nations in the world**. ………… **with Turkey, Indonesia, India, China, and Malaysia.**

***Korean decline causes miscalc, Asian instability, alliance collapse, US troop withdrawal and protectionist backlash***

**Song 98** (Jin Song is a Research Fellow with the Asia Pacific Center. She specializes on issues of political economy and Korean affairs. CENTER OCCASIONAL PAPER, ASIA-PACIFIC CENTER FOR SECURITY STUDIES, HONOLULU, HAWAII MAY 1998, “Financial Crisis in Korea: Implications for US-Korea Relations” <http://www.apcss.org/Publications/Ocasional%20Papers/OPKorea.html>, jj)

Introduction

**The political and social fallout from the East Asian economic crisis poses ………..** Congressional sentiment could be particularly prickly this year, given that many representatives are gearing up for November elections.

***War in Korea triggers every impact – kills the ozone, global ag, the economy, & prolif regime***

**Hayes and Green, 10** - \*Victoria University AND Executive Director of the Nautilus Institute (Peter and Michael, “-“The Path Not Taken, the Way Still Open: Denuclearizing the Korean Peninsula and Northeast Asia”, 1/5, <http://www.nautilus.org/fora/security/10001HayesHamalGreen.pdf>)

The consequences of failing to address the proliferation threat posed by the North Korea developments, ………. **is not just a regional threat but a global one that warrants priority consideration from the international community.**

**Renewable Tradeoff**

**Transition to renewables coming now**

Bowen ‘12

Currently a businessman, Robert Bowen served in the Colorado legislature in the 1980s as a moderate Democrat. He was also appointed by three different governors to serve on various boards and commissions. He has followed political news, national news headlines and international news closely for almost five decades.

8-22-12, Examiner, US carbon emissions are declining due to clean energy <http://www.examiner.com/article/us-carbon-emissions-are-declining-due-to-clean-energy>, jj

US carbon emissions are declining due to clean energy

A new report that studied 2,500 electrical power plants owned by 100 utilities in the United States was released this week and it shows …………. but odds are that he will slow if not reverse the trend to clean energy that is showing results in our air quality.

***SMRs specifically kill efficiency***

**Riches 12** (Dennis Riches, 2-17-12, Nuclear Free by 2045?, The (False?) Promise of Small Modular Reactors

<http://nf2045.blogspot.com/2012/02/false-promise-of-small-modular-reactors.html>, jj)

Worst of all, the **SMRs may be a false promise ……….. desire for more energy** and lead to more population growth.

**Continued investment key to renewable energy**

Kauffman ‘12

Richard Kauffman, Senior Advisor to the Secretary of Energy, 8-9-12, Seizing a Clean Energy Opportunity <http://www.huffingtonpost.com/richard-kauffman/a-clean-energy-opportunity_b_1761543.html?utm_hp_ref=green>, jj

Over the past four years, we have seen tremendous progress in the development ……….. projects across the country, we can once again lead the world in this critical sector.

**Green energy key to prevent extinction**

Jagger ‘08 (Bianca, Chair, World Future Council, CQ Congressional Testimony, "RENEWABLE ENERGY," 3/6, lexis)

“If we go beyond the point where human intervention ………… and addresses the threats of climate change and global inequality.

**Solvency**

**Solvency takes decades—SMRs require re-orienting the entire manufacturing industry**

Dylan Ryan 11, Masters in Mechanical Engineering, expertise in energy, sustainability, Computer Aided Engineering, renewables technology; Ph.D. in solar energy systems, 2011, "Part 10 – Small modular reactors and mass production options," [http://daryanenergyblog.wordpress.com/ca/part-10-smallreactors-mass-prod/-http://daryanenergyblog.wordpress.com/ca/part-10-smallreactors-mass-prod/](http://daryanenergyblog.wordpress.com/ca/part-10-smallreactors-mass-prod/-http%3A/daryanenergyblog.wordpress.com/ca/part-10-smallreactors-mass-prod/)

So there are a host of practical factors in favour smaller reactors. But what’s the down side? Firstly, economies of scale. ……….. these reactors would be slower to build (initially anyway) and probably more expensive too.

**SMR deployment causes extinction**

Gar Smith 11, Editor Emeritus of the Earth Island Journal, Summer 2011, “Don’t Mini-mize the Dangers of Nuclear Power,” Earth Island Journal, <http://www.earthisland.org/journal/index.php/eij/article/dont_mini-mize_the_dangers_of_nuclear_power/>

The radiation from Japan’s crippled Fukushima Daiichi reactors poisoned farmlands, contaminated the sea, and sent invisible mists of radiation wafting around the world. …………. Dave warned. “As the Welshman Allen Reese puts it: ‘At the edge of the abyss, the only progressive move you can make is to step back.’”

**Advantage 1**

**Forward deployment not key to heg**

Sapolsky et al. 09 (Harvey M. Sapolsky is a professor of public policy and organization at MIT. Benjamin H.

Friedman is a research fellow in defense and homeland security studies at Cato Institute.

Eugene Gholz is an associate professor of public affairs at the University of Texas at

Austin. Daryl G. Press is an associate professor of government at Dartmouth College.

Restraining Order: For Strategic Modesty, WORLD AFF. J., Fall 2009, at 84, 89-90, online, jj)

The United States would be better off pursuing a different grand strategy, ………… the threats they face are less severe than in the Cold War, and they can afford to defend themselves.

***No impact---we could recover from a cyberattack***

**Lewis ’03** (James, senior fellow and director of the Technology and Public Policy Program at CSIS, Summer, Knowledge, Technology & Policy, “Cyber terror: Missing in Action” springer link, jj)

In general, **analyses of cyber terrorism or cyber warfare …………… in response to attacks and show a surprising, even heroic, capability to resist and restore.**

**Prolif Adv FL**

***Nuclear leadership is impossible -- US arsenal creates hypocrisy and international resentment.***

**Perkovich, ‘8**

[George, vice president for studies and director of the Nonproliferation Program at the Carnegie Endowment for International Peace, “Abolishing Nuclear Weapons: Why the United States Should Lead,” October, <http://www.carnegieendowment.org/files/abolishing_nuclear_weapons.pdf>]

This Brief summarizes four security interests that would be served by making the **longterm project of abolishing nuclear weapons a central purpose of U.S. policy…………... Why should everyone cooperate in enforcing a system that looks like it was designed to favor just a few?**

### 2NC

***Korean leadership key to the nuclear renaissance***

**KEI 12** (Korean Economic Institute, South Korea’s Role in a Post-Fukushima Nuclear Environment <http://www.keia.org/publication/south-korea%E2%80%99s-role-post-fukushima-nuclear-environment>, jj)

South Korea’s ability to host a successful … **security after Fukushima.**

***Korean leadership solves the aff --- they’ll promote US non-prolif goals***

**GABI 12** (Global American Business Institute, 7-26, US-Korea Cooperation in the World Nuclear Energy Market <http://www.thegabi.com/strategy_consulting/korea_nuclear_energy_policy/fas_workshop_view.php?id=3>, jj)

The recent growth of South Korea’s … **global nuclear arena.**

***South Korea is a world leader in civil nuclear energy now --- their model solves prolif***

**Fitzpatrick 12** (Presentation by Mark Fitzpatrick, IISS, 8 September 2012, 2012 Moscow Nonproliferation Conference, Concurrent Session 3: Energy Security and Nuclear-Free Status of the Korean Peninsula: How to Achieve Both Goals “Contrasting Nuclear Models on the Korean Peninsula” online, jj)

So to answer the question posed … **security and safeguards.**

***Increased South Korean leadership role solves the global economy and green tech***

Maria Monica **Wihardja 11**, Visiting Fellow in the Indonesia Project, the Arndt-Corden Division of Economics, Australian National University; Associate Member, Center for Strategic and International Studies, Jakarta, October 21, 2011, “2011-2012 difficult years for G20,” online: http://www.thejakartapost.com/news/2011/10/21/2011-2012-difficult-years-g20.html

**These problems make** ***global policy …* leadership**, perhaps collectively.

***that’s an independent global nuclear war***

**Goh**, University of Oxford International Relations lecturer, 20**08**

[Evelyn, International Relations of the Asia-Pacific, "Hierarchy and the role of the United States in the East Asian security order," irap.oxfordjournals.org/content/8/3/353.full]

The centrality of these mutual processes … appear to be much worse.

***that’s global nuclear war***

**Panzner 8**—25-year veteran of the markets who has worked for for HSBC, Soros Funds, ABN Amro, Dresdner Bank, and J.P. Morgan Chase. New York Institute of Finance faculty member and a graduate of Columbia University. (Michael, Financial Armageddon, 136-8)

Continuing calls for curbs on … new world war.

***Korea’s on the cusp of commercialization***

**Baghdijan 9-20** (Victoria Baghdjian, Platts Nucleonics Week, 9-20-12, SMRs are cost-competitive but a ways from deployment: WNA speakers, Inside Stories Vol. 53 No. 38, Lexis, jj)

**One of the …** who these parties are.

***South Korea leads the world now in SMR tech***

Kwon **Dong-joon** July 5, 20**12** Korean All-in-one SMR Won World’s First Standard Design Approval, Etnews, <http://english.etnews.com/electronics/2610838_1303.html>, KEL

**South Korea’s** homegrown **SMART reactor …** its SMART reactor.

***those are key to growth***

**Roubini 09** (Global Economics, South Korea: Manufacturing Sector, <http://www.roubini.com/briefings/40498.php>, jj)

**South Korea's manufacturing sector, accounting … South Korean economy.**

***And, US has ceded SMR leadership to Korea now --- plan allows US companies to out compete Korean nuclear leadership***

**Hiruo 10**

(Elaine, Managing Editor of Platts, "SMR technology gives US chance at market leadership, vendors say," 9-2-10, Lexis)

**The US nuclear industry lost its … its home turf.**